

REMARKS

Election/Restrictions

The Official Action stated that newly submitted claims 17, 19, and 20 were directed to an invention that is independent or distinct from the invention originally claimed in that the Official Action stated that the claims are directed towards an embodiment of the acetabular implant where the centers of rotation of the insert and the kernel are offset from the axis of symmetry of the cup.

The Official Action stated that since applicant has received an action on the merits for the originally presented invention, this invention has been constructively elected by original presentation for prosecution on the merits, and therefore, the Official Action withdrew claims 17, 19, and 20 from consideration as being directed to a non-elected invention (citing to 37 CFR 1.142(b) and MPEP § 821.03).

Claim Rejections - 35 USC § 102

Claim 18 was rejected under 35 U.S.C. 102(b) as being anticipated by Marlow (US Pat. No. 5,989,294).

Claim Rejections - 35 USC § 103

Claims 11 and 12 were rejected under 35 U.S.c. 103(a) as being unpatentable over Marlow in view of McLean et al. (US Pub. No. 2004/0054418).

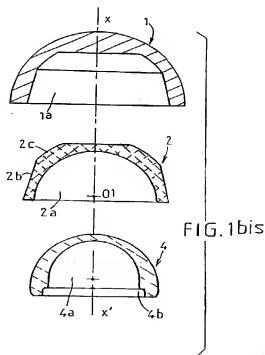
Claim 16 was rejected under 35 U.S.C. 103(a) as being unpatentable over Marlow in view of McLean et al. further in view of Tronzo (US Pat. No. 4,681,589).

Claim Amendments

Without prejudice, the previously pending claims have been replaced with new claims.

Although the claims include numeral references, these numeral references are not limiting and are provided to facilitate examination and demonstrating that the claimed features are illustrated in the drawing figures. Attention is called specification to Figure 1bis, reproduced below.

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The independent claim has been amended to recite an acetabular implant comprised of three elements: a cup 1, an insert 2, and a hemispherical kernel 4.

Further, the claim requires the feature of the centers of rotation of the insert and of the kernel be aligned on the axis symmetry (x-x'), but not coincident (being non-coincident) when the hemispherical cup, insert, and hemispherical kernel are assembled.

The present invention therefore functions as a double mobility system allowing for a greater freedom of movement.

The prior references do not teach or suggest at least this advantageous feature.

A review of the prior art will be helpful.

Serbousek (US6610097) discloses a kernel 16 being fixed in the insert 14 via a locking tab 42, and the insert 14 is fixed into the cup 12 via male and female tapers 30, 44 (see figure 3, and col. 4, lines 57 to 61). Accordingly, the implant disclosed in Serbousek is a single mobility implant as there is only one center of rotation (the center of rotation of the kernel).

In contrast, the acetabular implant of the present invention is a double mobility implant as there are two centers of rotation: the center of rotation of the kernel and the center of rotation of the insert.

Huiskes et al. (US5314494) disclose an implant constituted of just only two elements (figure 10, element 72

corresponding to the cup and element 73 corresponding to the insert). There is no kernel. Moreover, the element 73 is fixed into the element 72 when assembled (via elements 71 and 77). So the implant is a single mobility implant.

Bekki et al. (US5092898) discloses that the centers of rotation are coincident.

Tronzo (US4681589) discloses an implant constituted of just only two elements, a cup 12a and the insert 46.

These elements are configured so that there is just only one center of rotation (the center of the rotation of the insert 46 for the femoral head).

So the Tronzo implant is a single mobility implant.

Subba Rao et al. (US2001/0051831) disclose a femoral head and a stem associated. There is no teaching to a person skilled in the art to arrive to the implant of the present invention.

Noiles (US 4642123) discloses that the centers of rotation are coincident (figure 5).

Marlow (US 5 989 294) discloses centers of rotation that are coincident because all bearing balls 14 have the same diameter and are arranged in the kernel 13 with a regular manner (figures 2-9).

Thus, the centers of rotation (the center of the element 11 corresponding to the insert, and the center of the

element 13 corresponding to the kernel) are necessarily coincident.

McLean et al.(US 2004/0054418) discloses an implant constituted of just only two elements, shell 12 and a liner 14.

These elements are configured so that there is just only one center of rotation (the center of the rotation of the line 14 for the femoral head 20).

So the implant of McLean et al. is a single mobility implant.

From the above, given the construction of device of each reference, and the operation of each reference's device, it is clear that none of these documents suggest the features of the invention where an acetabular implant is comprised of three elements: a cup 1, an insert 2, and a hemispherical kernel 4, and where the centers of rotation of the insert and of the kernel are aligned on the axis symmetry (x-x'), but not coincident when the hemispherical cup, insert, and hemispherical kernel are assembled.

None of the references teach or suggest such a construction such that the acetabular implant functions as a double mobility system allowing for a greater freedom of movement.

Accordingly, reconsideration and allowance of all the claims are therefore respectfully requested. In view of the foregoing amendments and remarks, it is respectfully submitted

that the present application is in condition for allowance and early notice to that effect is hereby requested.

If the Examiner has any comments or proposals for expediting prosecution, please contact the undersigned attorney at the telephone number below.

The Commissioner is hereby authorized in this, concurrent, and future replies, to charge payment or credit any overpayment to Deposit Account No. 25-0120 for any additional fees required under 37 C.F.R. § 1.16 or under 37 C.F.R. § 1.17.

Respectfully submitted,

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